

Date: Thu, 15 Apr 93 18:01:29 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #468  
To: Info-Hams

Info-Hams Digest                      Thu, 15 Apr 93                      Volume 93 : Issue    468

Today's Topics:

                    10meters..and a mini flame.  
                    5/8 wave 15 meter antenna  
                    Address of OH1LHS?  
    An Experiment : Vertical vs. Horizontal (2 msgs)  
                    Chassis punches for tube sockets?  
                    dualband HT with alpha display???  
    Equipment for a shuttle contact? (2 msgs)  
                    GRC-109  
    Looking for Contest Logging Software  
                    QRM in Hong Kong  
    Two-Line Orbital Element Set: Space Shuttle  
                    WANTED: Complete Freq. List  
    Wanted: DAK MR-101s AM/FM Stereo/shortwave radio

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
-----

Date: Wed, 14 Apr 1993 23:48:45 EST  
From: anomaly.sbs.com!n1mpq!news@uunet.uu.net  
Subject: 10meters..and a mini flame.  
To: info-hams@ucsd.edu

bly@btree.uucp (Roger Bly) writes:

> In article <1993Apr12.210150.15732@ttinews.tti.com> sorgatz@avatar.tti.com (E  
> rik Sorgatz) writes:  
>> WHEN IS THE ARRL GONNA DO SOMETHING ABOUT THE !@#\$\$%^&\*()\_+ bootleggers FROM

>>11 meters THAT KEEP RUINING THE 28.0-28.15 SEGMENT? ARE YOU PEOPLE EVEN AWARE  
> E  
>>OF THE PROBLEM?  
>  
> Personally, I find the "bootleggers" much more interesting to talk to than  
> the hams. It also gives me a chance to work on my Spanish. Any time you try  
> to cram 4 million people into 40 channels you're going to have a problem.  
> I think that we should reallocate a big chunk of 10m to CB. And give them  
> some VHF/UHF also. After all, the "waves" belong to the citizens. Seems  
> sad that after allocations for government, business, international satellites  
> ,  
> common carrier, amateur, etc., that the citizens are left with 40 channels.  
> Now I know how the American Indians feel.  
>  
> -Roger Bly (ka6mwt)

Wow, I hope you're being sarcastic. If not, you should join all the  
no-codes screaming for HF access because if you opened up the lower end  
of 10m to the CB'ers, the no-code bozos would definitely go ballistic!

Tony

```
-----
-- Anthony S. Pelliccio, kd1nr/ae      // Yes, you read it right, the //
-- system @ garlic.sbs.com            // man who went from No-Code //
-----// (Thhhppptt!) to Extra in //
-- Flame Retardent Sysadmin           // exactly one year! //
-----
```

```
-- This is a calm .sig! --
-----
```

```
-----
Date: Thu, 15 Apr 1993 22:19:47 GMT
From: usc!zaphod.mps.ohio-state.edu!uwm.edu!linac!att!cbnewsml
jeffj@network.UCSD.EDU
Subject: 5/8 wave 15 meter antenna
To: info-hams@ucsd.edu
```

I am using a G5RV on 15 meters right now and it is ok to say the least.  
Looking in a wire antenna book that I have they show how to make a 5/8  
15 meter antenna. As 5/8 antennas are supposed to have 3 db of gain over  
a dipole it looks like a good way to go. I was wondering if anyone else  
has used 5/8 wave antennas on HF and what would the drawbacks be? I  
realize that it might be a bit noisier but getting almost a full S unit  
improvement would be nice to have as I work alot of 15 meters CW and SSB.  
Thanks for any and all help! 73!

Jeff

--

Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!  
jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.  
Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?

-----  
Date: Thu, 15 Apr 1993 19:20:41 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!uwm.edu!linac!att!att-out!cbfsb!  
cbnewsg.cb.att.com!wstrahl@network.UCSD.EDU  
Subject: Address of OH1LHS?  
To: info-hams@ucsd.edu

Worked 4N4/OH6XY. He said qsl via OH1LHS. OH1LHS is not in the 1993  
DX Callbook. Does anyone have his address?

Tnx!

Wayne Strahl - W9II wstrahl@cbnewsg.att.com

-----  
Date: 15 Apr 1993 22:04:13 GMT  
From: usc!elroy.jpl.nasa.gov!sdd.hp.com!zaphod.mps.ohio-state.edu!  
howland.reston.ans.net!agate!darkstar.UCSC.EDU!helios.UCSC.EDU!  
sutin@network.UCSD.EDU  
Subject: An Experiment : Vertical vs. Horizontal  
To: info-hams@ucsd.edu

In article <1993Apr15.183137.19181@VFL.Paramax.COM> rossi@VFL.Paramax.COM (Pete Rossi) writes:

>I ran an little experiment over the past few days comparing a 1/2 wave  
>vertical dipole to a 1/2 wave horizontal dipole on 20 meters.

I did a similar experiment last year. I lived in an apartment on the  
third floor with scads of RFI. I had two antennas, a horizontal  
magnetic loop on 20M, and a top-fed 20M half wave (ie, magnet wire  
stretching from my window down to the ground). The vertical was 1-2 S  
units better, and was no worse at rejecting near field noise.

Brian Sutin kd6tla sutin@lick.ucsc.edu  
Lick Observatory, UCSC Santa Cruz, CA 95064  
Fred: "May I rescue you?"  
Ginger: "No, thank you. I prefer being in distress."

-----

Date: Thu, 15 Apr 1993 23:56:38 GMT

From: usc!zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!osuunx.ucc.okstate.edu!olesun!gcouger@network.UCSD.EDU

Subject: An Experiment : Vertical vs. Horizontal

To: info-hams@ucsd.edu

In article <1993Apr15.183137.19181@VFL.Paramax.COM> rossi@VFL.Paramax.COM (Pete Rossi) writes:

>16 1/2 foot piece of aluminum tubing on top of a 18 foot wooden mast. A  
>piece of heavy wire about 16 1/2 feet long extends down the side of the  
>wooden mast to form the other half of the dipole. The center of the coax is  
>connected to the bottom of the tubing and the shield to the top of the lower

I beleive you would have better results if the coax was inside a peice of tubing and a stack of ferite beads were placed on the coax just before it entered the tubing.

Gordon

Gordon Couger

Agriculture Engineering Oklahoma State University

114 Ag Hall, Stillwater, OK 74074

gcouger@olesun.agen.okstate.edu 405-744-9763 day 624-2855 evenings

-----  
Date: Thu, 15 Apr 1993 21:54:13 GMT

From: usc!sdd.hp.com!hp-cv!hp-pcd!hplsla!tomb@network.UCSD.EDU

Subject: Chassis punches for tube sockets?

To: info-hams@ucsd.edu

rg@futserv.austin.ibm.com (R.G. Keen) writes:

>My apologies if this is not good place to post this.  
>Does anyone know where I can buy chassis punches to make  
>holes for tube sockets? I am discovering tubes for the  
>first time, and having a lot of fun playing with them,  
>but the blinking holes for sockets are driving me crazy.  
>Even old used punches would be a help.

Should be able to get them at most electronics supply places, like Newark or Mouser, or your own local places. Also check with local industrial tool supply places. Greenlee is a good brand. Another handy tool is a Whitney hand punch, for holes up to just over 1/4" for the "Jr." punch. There's a larger one (XX?) that goes to bigger holes and has a deeper throat, but the price is a bit steep. Though everyone calls them just "Whitney," I believe the company is Roper-Whitney. There are import knockoffs of these, but I haven't liked them

as well.

-----  
Date: Thu, 15 Apr 1993 00:11:30 EST  
From: anomaly.sbs.com!n1mpq!news@uunet.uu.net  
Subject: dualband HT with alpha display???  
To: info-hams@ucsd.edu

hemstree@lamar.acns.colostate.edu (Charles Hemstreet) writes:

>  
> My wife recently passed her tech-nocode and I am looking for a  
> dualband HT that has an alphanumeric display. Particularly, I am  
> looking for something that will display a short phrase with the  
> frequency to help her keep the freq's straight. So if she was on  
> 145.115, the display would also say NCARC Repeater. Or 147.570  
> Simplex1... you get the idea. Any recommendations?

Kenwood TH-78A!!!!!!

For a mobile with alphanumeric capabilities on 2m only, try the  
Yaesu FT-2400H

Tony

-----  
-- Anthony S. Pelliccio, kd1nr/ae // Yes, you read it right, the //  
-- system @ garlic.sbs.com // man who went from No-Code //  
-----// (Thhhppptt!) to Extra in //  
-- Flame Retardent Sysadmin // exactly one year! //  
-----  
-- This is a calm .sig! --  
-----

-----  
Date: Thu, 15 Apr 1993 15:47:23  
From: mvb.saic.com!zipppy.telcom.arizona.edu!nauvax.ucc.nau.edu!  
cvm@network.UCSD.EDU  
Subject: Equipment for a shuttle contact?  
To: info-hams@ucsd.edu

I posted a similar question earlier and got no response so I'll try  
again.

What equipment is necessary to make a contact with the space shuttle or  
to even hear it?

I have been trying to at least hear them for the entire STS-56 mission without success. I have tried listening from my mobile 2 meter with a 5/8 wave antenna on my car and I have tried the same radio in my house with a 5/8 wave j-pole on the roof. The j-pole feed line is about 50 feet of RG-8. I have even tried listening at the same time with my HT and an AEA Hot Rod (1/2 wave). I have not heard anything, voice or packet. I have been using a couple of different statellite orbit prediction programs to know when to listen.

This seems like a reasonable setup to me to at least listen. I have thought that perhaps the signal is be so weak that it is lost on the 50' of feed line and not strong enough for my radio to pickup. In that case I would probably need a preamp at the antenna feed point. Also, it seems that the position of the shuttle antenna would need to be favorable during the current pass for me to hear it.

If you have heard the shuttle or made a contact could you let me know what equipment you used? Thanks for any help you can give.

-----  
Chris Michels -- Systems Programmer                   cvm@nauvax.ucc.nau.edu  
Northern Arizona University -- Flagstaff, AZ       cvm@nauvax.bitnet  
Phone: (602) 523-6495                               N7YIU

-----  
Date: Thu, 15 Apr 1993 23:38:23 GMT  
From: news.tek.com!tvnews!thd.tv.tek.com!bill@uunet.uu.net  
Subject: Equipment for a shuttle contact?  
To: info-hams@ucsd.edu

In article <930415154723@nauvax.ucc.nau.edu> cvm@nauvax.ucc.nau.edu (Chris Michels) writes:

>I have been trying to at least hear them for the entire STS-56 mission  
>without success.

I've also been listening without success. I figured it was just my lousy setup (PRO-2006 w/ built-in whip), so I had low expectations. I have managed to hear a local packet station and several hams that either don't know or don't care about keeping the channel clear.

I did read a posting that said one of the school contacts used a directional antenna that was kept pointed at the shuttle.

--

Bill McFadden    Tektronix, Inc.   P.O. Box 500   MS 58-639   Beaverton, OR 97077  
bill@tv.tv.tek.com, ...!tektronix!tv.tv.tek.com!bill       Phone: (503) 627-6920

How can I prove I am not crazy to people who are?

-----

Date: 15 Apr 93 20:04:47 EDT  
From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!darwin.sura.net!udel!  
news.intercon.com!psinntp!arrl.org@network.UCSD.EDU  
Subject: GRC-109  
To: info-hams@ucsd.edu

If you're familiar with this equipment, especially if  
you know the difference between a GRC-109 and a GRC-109A,  
please contact me via email. Thanks and 73.

Jim, KR1S

--  
jkearman@arrl.org

-----

Date: Thu, 15 Apr 1993 18:36:46 GMT  
From: pa.dec.com!e2big.mko.dec.com!peavax.mlo.dec.com!usenet@decwrl.dec.com  
Subject: Looking for Contest Logging Software  
To: info-hams@ucsd.edu

In article <MAJEWSKI.93Apr14175643@spsd630a.erim.org>, majewski@spsd630a.erim.org  
(Ron Majewski) writes:

> I am interested in getting some contest logging software for both the  
> PC and the Mac. My immediate need is for Field Day, but I'd like to  
> be able to use the software for other contests as well.

You can grab a shareware copy of CT from SIMTEL20:

pd1:<msdos.hamradio>ct626.zip

However, I don't believe it supported FD until version 7 (CT is up to  
version 8 now).

- Jim AD1C

--

James J. Reisert AD1C	Internet: reisert@mlo.dec.com
Digital Equipment Corp.	UUCP: ...decwrl!mlo.dec.com!reisert
146 Main Street - ML03-6/C9	Voice: 508-493-5747
Maynard, MA 01754 FAX:	508-493-0395

-----  
Date: Thu, 15 Apr 1993 00:07:06 EST  
From: anomaly.sbs.com!n1mpq!news@uunet.uu.net  
Subject: QRM in Hong Kong  
To: info-hams@ucsd.edu

ee\_hflo@uxmail.ust.hk (UST Radio Station) writes:

> Since 1991, one of free access repeater (VS6KP) was jammed by  
> some illegal ( guy without licence) using some kinds of jammer.  
>  
> Their QRM jam the repeat VS6KP everyday least for 2 years.  
> Members of HARTS make hundreds of complaint to the Hong Kong Post Office  
> Telecommunication Unit. The guy in Post office just monitor the QRM and  
> report to us. My godness !!  
>  
> We will give more pressure to the Post office by sending complain  
> letter to them everyday until the QRM was "removed" :<  
>  
> I hope that Hong Kong will have clear channel for QSO  
>  
> VR2YJR

Hmmm.. does this sounds suspiciously like our FCC here in the states  
where jammers pretty much get away with anything because they've taken  
most of the bite out of enforcement. {sigh}

Tony

-----  
-- Anthony S. Pelliccio, kd1nr/ae // Yes, you read it right, the //  
-- system @ garlic.sbs.com // man who went from No-Code //  
-----// (Thhhppptt!) to Extra in //  
-- Flame Retardent Sysadmin // exactly one year! //  
-----  
-- This is a calm .sig! --  
-----

-----  
Date: Thu, 15 Apr 1993 23:06:16 GMT  
From: iris.mbvlab.wpafb.af.mil!blackbird.afit.af.mil!tkelso@uunet.uu.net  
Subject: Two-Line Orbital Element Set: Space Shuttle  
To: info-hams@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are  
carried on the Celestial BBS, (513) 427-0674, and are updated daily (when



possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

STS 56

1 22621U 93 23 A 93105.06179397 .00044513 00000-0 12649-3 0 230

2 22621 57.0022 147.2850 0004246 288.7332 38.0941 15.92991629 1084

1993 023B

1 22623U 93 23 B 93103.37312705 .00041032 00000-0 11888-3 0 86

2 22623 57.0000 155.1150 0004422 293.4650 66.5967 15.92653917 803

--

Dr TS Kelso  
tkelso@afit.af.mil

Assistant Professor of Space Operations  
Air Force Institute of Technology

-----  
Date: Thu, 15 Apr 1993 20:58:57 GMT

From: usc!howland.reston.ans.net!gatech!willis1.cis.uab.edu!spam.dom.uab.edu!  
user@network.UCSD.EDU

Subject: WANTED: Complete Freq. List

To: info-hams@ucsd.edu

In article <C5IIvy.1oH.1@cs.cmu.edu>, eel@silverblue.fac.cs.cmu.edu (Lee  
Furnival) wrote:

>

> Does somebody know where I might be able to ftp a list of all radio  
> frequencies used in the U.S.? In particular, I am interested in a  
> list which gives the frequency and then what it is used for. If there  
> is no "known" use for a given frequency, then I would like to see  
> what that frequency is hypothesized to carry. I use the term "radio"  
> lightly. Essentially, I am after a list which would give all usable  
> frequencies, from VVVVLF to VVVVHF (very,very,very,very low/high freq.)  
> If no such thing is available via ftp then maybe someone could recommend  
> some other references. Any info appreciated, and e-mailed info is  
> appreciated even more. Thank you.

>

> Lee Furnival

> eel@silverblue.fac.cs.cmu.edu

In the ARRL Radio Handbook there is a table that shows the information  
you need. It is in chapter 39, and not indexed, unfortunately. It also  
shows the harmonics of each amateur band to help make clear what amateur  
radios can potentially interfere with. For a more detailed list, go to

the  
government documents section at your library and look in the section  
pertaining to the FCC. They published a handbook of the entire US  
Frequency allocations. There are no empty spots.

Steve KD4TTC

-----  
Date: 15 Apr 93 17:19:51 EST  
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa  
Subject: Wanted: DAK MR-101s AM/FM Stereo/shortwave radio  
To: info-hams@ucsd.edu

In article <1qics5\$3v6@usenet.INS.CWRU.Edu>, aj008@cleveland.Freenet.Edu  
(Aaron M. Barnes) wrote:

> I would like to buy a DAK MR-101s radio, but I cant seem to conta  
> ct the DAK corperation.

.....  
> I have heard all the bad press about the DAK, but for \$30, It is  
> just perfect for me.

Aaron-

I thought the same thing a couple of years ago, when the older  
MR-101(plain) became available "used", also for \$29 + P&H. I was wrong.

Today, the radio is nearly useless. Primary problem is bad switches.  
Secondary problem is poor sensitivity, with images almost as strong as main  
signals on the shortwave bands. (Strong images might be considered a  
"feature", since they allow reception of frequencies outside the normal  
limited range!) There are numerous tertiary problems related to poor  
design and/or workmanship.

I suppose it is a \$29 lesson we each have to learn for ourselves.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

-----  
Date: Thu, 15 Apr 93 21:24:27 GMT  
From: usc!howland.reston.ans.net!gatech!pirates!news-feed-1.peachnet.edu!umn.edu!  
csus.edu!netcom.com!netcomsv!orchard.la.locus.com!prodnet.la.locus.com!  
lando.la.locus.com!dana@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <734345121.AA00756@his.com>, <1993Apr9.165907.66000@cc.usu.edu>,  
<LINNIG.93Apr14160458@m2000.dseg.ti.com>tcom.co  
Subject : Show of Force (was Re: Want Jammer in Slammer)

In article <LINNIG.93Apr14160458@m2000.dseg.ti.com> linnig@m2000.dseg.ti.com (Mike Linnig) writes:

>In article <1993Apr9.165907.66000@cc.usu.edu> slp9m@cc.usu.edu (Scott E. Parker WA7VYJ) writes:

>

>> The first thing to do is for all involved in the hunt (the more the merrier) to  
>> go knock on the guy's door and have a group spokesman politely tell him  
>> something on the order of, "we know what you do and we know who you are".  
>> Doesn't always work, but it has in a number of cases. It's worth a try before  
>> resorting to more drastic measures.

>

>It should be particularly effective if you know a ham who is also a police  
>officer and let him be the spokesman (in uniform if possible).

>

In Lancaster (California) we recently put a very active jammer out of business. Malicious interference had been traced repeatedly to a certain location where two young (12 and 15) hamsters live (we all suspected the older hamster, but it turned out to be the younger).

One evening, the home was staked out by a number of local hams. One of the local hams is a California Highway Patrolman; he was not staking the house out but had stopped by while on duty. One of the hams works for a Federal agency; he was able to bring a DF van (actually a motorhome) that gives DF bearings in 100 mS, and has a GPS driven computer map of the area. One of the hams is a recently retired government communications specialist; he's also a retired deputy sheriff reserve.

One the neighbors, seeing an ominous motorhome covered with strange antennas and radomes, called the cops. The deputy who showed immediately recognized the retired reserve, and they started catching up on the old times.

Imagine if you walked outside and found two cops and strange van full of serious-faced men. What would you do? Would you stop?

Well, the point is moot; the jammer is blind. However, his (hamster) brother described the scene to him, and the young jammer broke into tears. He thought he was going to jail. I don't know if an older/wiser jammer would have been as intimidated.

--

\* Dana H. Myers KK6JQ | Views expressed here are \*  
\* (310) 337-5136 | mine and do not necessarily \*

\* dana@locus.com DoD #466 | reflect those of my employer  
\*  
\* This Extra supports the abolition of the 13 and 20 WPM tests \*

-----  
Date: 15 Apr 1993 14:28:36 -0700  
From: usc!sdd.hp.com!nobody@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Apr11.214831.11089@cbnewsm.cb.att.com>,  
<1993Apr12.220523.27318@TorreyPinesCA.ncr.com>,  
<1993Apr13.232910.16799@telesoft.com>  
Subject : Shuttle frequencies in San Diego (Was Re: Shuttle Audio broadcast?)

I am the original poster. Well, since my attempt to restrict  
distribution didn't seem to work, I will post the summary to  
a broad distribution. Apologies to those who don't care...

I haven't tried these frequencies yet (just got back into town),  
but here are the ones I've been told:

146.640  
443.400  
448.625  
448.675  
448.950  
449.450

Thanks to those who replied!

--  
Craig Bosworth (619) 592-8609  
Hewlett-Packard, San Diego Division  
craigb@sdd.hp.com

-----  
Date: Thu, 15 Apr 93 17:18:30 GMT  
From: swrinde!gatech!hubcap!ncrcae!ncrhub2!torynews!kevin@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1372@arrl.org>, <05yy03oud0wy00@amdahl.uts.amdahl.com>,  
<pschleck.734848701@cwis>p  
Subject : Re: RFD: rec.radio.amateur reorganization

In article <pschleck.734848701@cwis> pschleck@cwis.unomaha.edu (Paul W Schleck  
KD3FU) writes:

>

>I really wonder if we can successfully create such a forum for  
>newcomers. The news.newusers.questions ghetto sticks out in my mind as  
>an example of wasted space where the same questions are asked over and  
>over. There is a finite, and predictable, amount of information to get  
>across to novices, and duplicating information that can be found in  
>FAQ's and FTP archives may not be desirable.  
>

I agree with this; I don't think there are many folks in the r.r.a.m. group who are magnanimous enough to read the beginner group and answer the same questions over and over and over again (except those who specifically enrolled themselves in the elmers list); then the hapless beginner would be forced to post to r.r.a.m., inviting flames. No, I think that beginner questions are best addressed in the FAQ as we and most other groups do now, and I will vote "no" for a r.r.a.beginner group.

>  
>Put me down also as taking a liking to rec.radio.amateur.dcom.\*  
>over .digital.\*, as it's consistent with comp.dcom.\*. However, I'm  
>favorably disposed to either. Any other opinions either way?  
>  
>73, Paul W. Schleck, KD3FU  
>  
>pschleck@unomaha.edu  
>

I'm not familiar with the comp.dcom.\* hierarchy, and just looking at the nonword "dcom" doesn't give me a feel for what this group would be about. I prefer "digital", as this word has a definite meaning and is in fact a broader topic, encompassing both digital communications modes and things that are not so obviously communication, i.e., packet telemetry or other digital control/status signals.

--  
Kevin Sanders, KN6FQ                      NCR Torrey Pines  
kevin.sanders@torreypinesca.ncr.com      (619) 597-3602  
kevin%beacons@cyber.net

-----  
End of Info-Hams Digest V93 #468  
\*\*\*\*\*